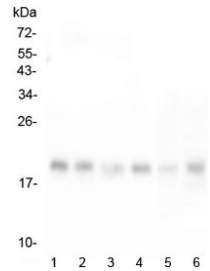
RMI2 Antibody / RecQ-mediated genome instability protein 2 (RQ4946)

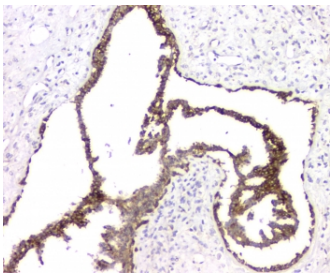
Catalog No.	Formulation	Size
RQ4946	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

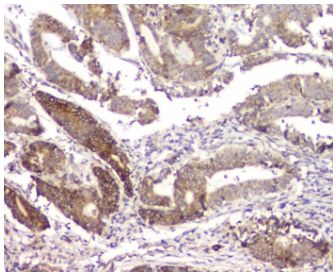
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	Q96E14
Localization	Nuclear, possibly cytoplasmic
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml Flow Cytometry : 1-3ug/10^6 cells
Limitations	This RMI2 antibody is available for research use only.



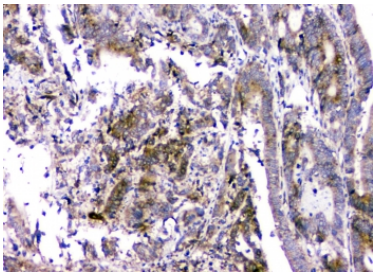
Western blot testing of human 1) HeLa, 2) T-47D, 3) HepG2, 4) K562, 5) mouse liver and 6) mouse HEPA1-6 lysate with RMI2 antibody at 0.5ug/ml. Expected molecular weight ~18 kDa.



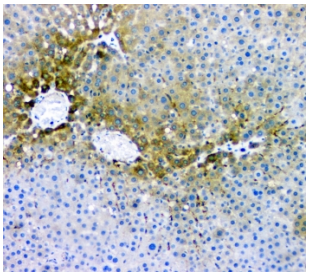
IHC staining of FFPE human breast cancer with RMI2 antibody at 1ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.



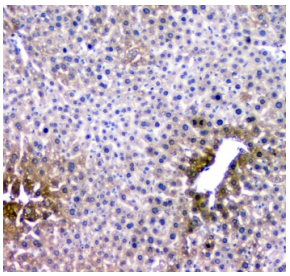
IHC staining of FFPE human intestinal cancer with RMI2 antibody at 1ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.



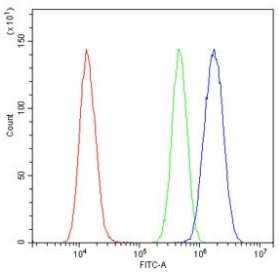
IHC staining of FFPE human intestinal cancer with RMI2 antibody at 1ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.



IHC staining of FFPE rat liver with RMI2 antibody at 1ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.



IHC staining of FFPE mouse liver with RMI2 antibody at 1ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.



Flow cytometry testing of human U-2 OS cells with RMI2 antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= RMI2 antibody.

Description

RMI2 is a component of the BLM (RECQL3) complex, which plays a role in homologous recombination-dependent DNA repair and is essential for genome stability. This gene is mapped to 16p13.13. RMI1 and RMI2 were present in approximately stoichiometric amounts with other BLM complex components, including topoisomerase-3-alpha (TOP3A), RPA (RPA1), and BLAP250. RMI2 also associated with RMI1 and TOP3A in a second complex. RMI1 and RMI2 interacted directly, and both were essential for stability of the BLM complex. Depletion of either RMI1 or RMI2 depleted the other protein by 80 to 90%. Chicken DT40 cells depleted of Rmi2 displayed elevated sister chromatid exchange, but other functions of the BLM complex appeared intact. Mutation analysis revealed that interaction between human RMI2

and BLM was essential for suppression of sister chromatid exchange.

Application Notes

Optimal dilution of the RMI2 antibody should be determined by the researcher.

Immunogen

Amino acids KMTDLSDNPIHESMWELEVEDLHRNIP from the human protein were used as the immunogen for the RMI2 antibody.

Storage

After reconstitution, the RMI2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.